

REMARKS

Claims 69-88 are currently pending in the subject application and are presently under consideration. Claims 69, 73, 74, 77-81 and 87 have been amended as shown on pages 2-7 of the Reply. Claim 72 has been cancelled herein. The below comments present in greater detail distinctive features of applicants' claimed invention over the cited art that were conveyed to the Examiner over the telephone on August 14, 2007.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Objection to Oath/Declaration

The oath/declaration was objected to as it did not include the mailing address of each inventor. Withdrawal of this objection is requested in view of the Application Data Sheet filed herewith including this information.

II. Rejection of Claims 74 and 77-81 Under 35 U.S.C §112

Claims 74 and 77-81 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Withdrawal of this rejection is requested in view of the following. Claim 74 recites an equation for determining the attribute-value discrimination (See. equation 6a, page 46 lines 2-8). Claim 77 recites an equation for determining the similarity value for a pair of base categories (See. equation 4a, page 43, lines 14-20). Claim 78 recites an equation for determining the similarity for a pair of base categories (See. equation 2c, pg. 41 line 14 to pg. 42 line 13). Claim 79 recites an equation for determining similarity of two combined categories (See. equation 3a, pg. 42 lines 13-25). Claim 80 recites an equation for determining the similarity of two combined categories (See. equation 3b, page 45, lines 1-11). Claim 81 recites an equation for determining similarity of two combined categories (See. equation 3c, pages 45 lines 1-12). Accordingly, it is requested that this rejection be withdrawn.

III. Rejection of Claims 1 and 87 Under 35 U.S.C. §101

Claims 1 and 87 stands rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. In view of the amendments to independent claims 69 and 87 this

rejection is now moot and should be withdrawn.

IV. Rejection of Claims 69-76, 82-83 and 87-88 Under 35 U.S.C. §102(b)

Claims 69-76, 82-83 and 87-88 stand rejected under 35 U.S.C. §102(b) as being anticipated by Sharon Garber, *et al.* (WO 90/04231). Withdrawal of this rejection is respectfully requested for at least the following reasons. The cited reference fails to teach or suggest all limitations of the subject claims.

A single prior art reference anticipates a patent claim only if it ***expressly or inherently describes each and every limitation set forth in the patent claim.*** *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The ***identical invention must be shown in as complete detail as is contained in the ... claim.*** *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Applicants' claimed invention relates to providing an interactive cluster visualization tool that allows a user to graphically visualize clusters of data. To this end, independent claim 1 recites *a computer-implemented system for automatically categorizing unknown incoming data and a category visualization system that displays a graphic representation of each category as a hierarchical map, comprising: a node corresponding to each base category; nodes corresponding to combinations of similar categories; a leaf node corresponding to a base category, the leaf node is positioned as a cluster of nodes at a lowest level of the hierarchy wherein combinations of similar categories are positioned on top of the leaf node, forming successively higher levels of the hierarchy; a root node corresponding to a category that contains all records in a collection, the root node forms top of the hierarchy; a non-leaf node corresponding to each combined category, wherein similar base categories are combined into a combined category; wherein each non-leaf node has two arcs that connect the non-leaf node to two nodes corresponding to sub-categories of the combined category; and wherein if a node is selected, the system displays additional information about corresponding category, the additional information is at least one of number of records in the category or characteristic attributes of the category.* Independent claim 87 recites similar limitations. Garber *et al.* fails to teach or suggest such novel features recited in the subject claims.

Garber *et al.* relates a computerized information system for dynamically organizing information in order to present to a user relationships among portions of the information. At page 8 of the Office Action, the Examiner contends that Garber *et al.* discloses such novel aspects of applicants' claimed invention. Applicants' representative avers to the contrary. In accordance with the claimed subject matter, the system automatically categorizes incoming case data into clusters, summarizes the clusters and visually depicts their hierarchical organizations. Each base category is represented by a node, and nodes are connected to their combined categories by an arc. A user browsing through the hierarchy is allowed to select a node and the system displays attributes, attribute values and other data that meaningfully characterize each node. At the cited portions, Garber *et al.* discloses presentation mode selection process activated by a user on his first approach to the system or while the interaction with a presentation mode terminates. This incorporates user preferences into the mode selection process and also places the name of the presentation mode favored by that user in his temporal history slot. In contrast, the claimed subject matter allows the user to select a node in the hierarchy and displays attributes and attribute values that meaningfully characterize each node. Thus, Garber *et al.* is silent regarding *if a node is selected, the system displays additional information about corresponding category, the additional information is at least one of number of records in the category or characteristic attributes of the category* as taught by the subject claims of applicants' claimed invention. Accordingly, it is requested that this rejection with respect to independent claims 69 and 87 (and the claims that depend from) should be withdrawn.

V. Rejection of Claims 77-81 Under 35 U.S.C. §103(a)

Claims 77-81 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Garber as applied to claims above, and further in view of Laurence Gilliick, *et al.* (US 4,903,305). Withdrawal of this rejection is respectfully requested for at least the following reasons. Claims 77-81 depend from independent claim 69. As previously discussed, Garber *et al.* fails to disclose all limitations of independent claim 69 (and the claims that depend from). Gilliick *et al.* relates to a method for representing words models for use in speech recognition and fails to compensate for the aforementioned deficiencies of Garber *et al.* Accordingly, this rejection should be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP357USB].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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